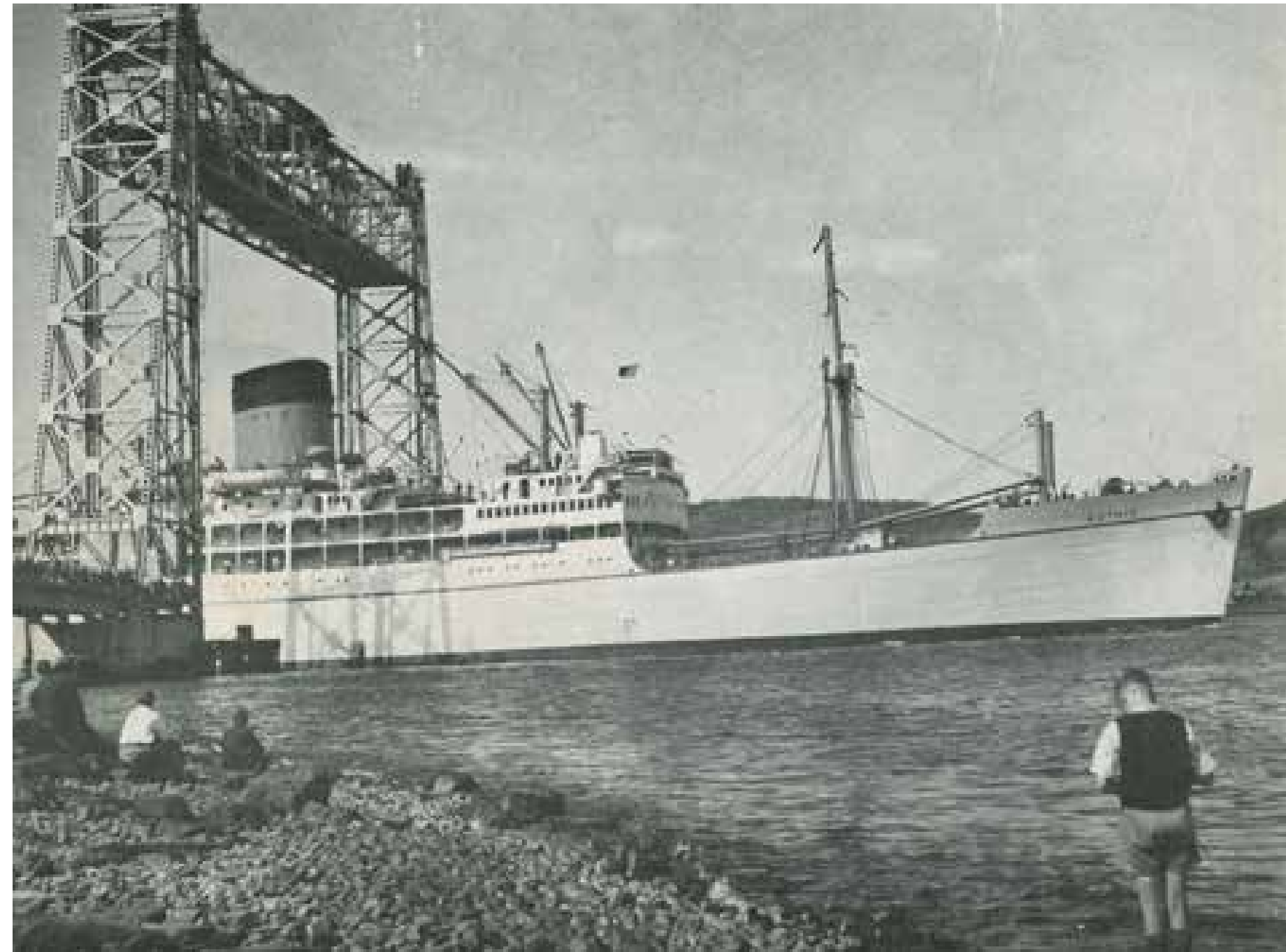


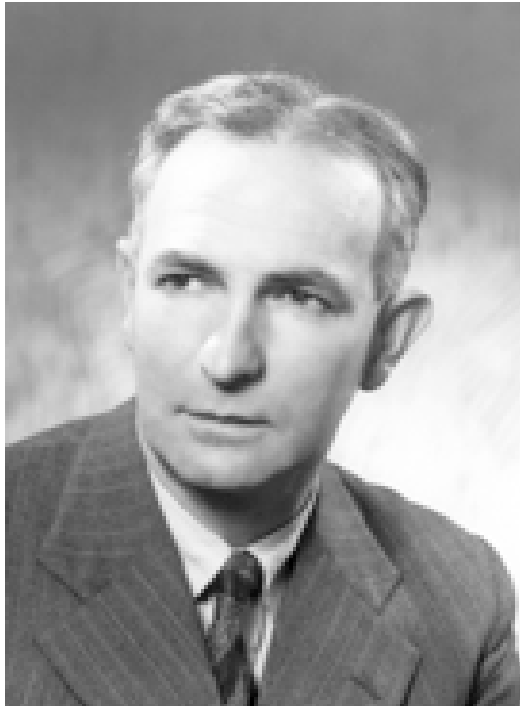
# The Floating Bridge 1943–1964

Before the floating bridge opened, people wanting to cross the River Derwent had to wait for a river ferry or drive 20 km north to Bridgewater. Once the bridge was opened, people could cross at any time of the night or day.



Left: The Gothic was the ship used in 1954 to bring the Queen and the Duke of Edinburgh to Hobart. This event was captured by many including a small boy with his box brownie in the foreground. The span could be lifted to allow river traffic to pass in 2 minutes by an operator in the control house on the span. Ships had priority over road traffic.

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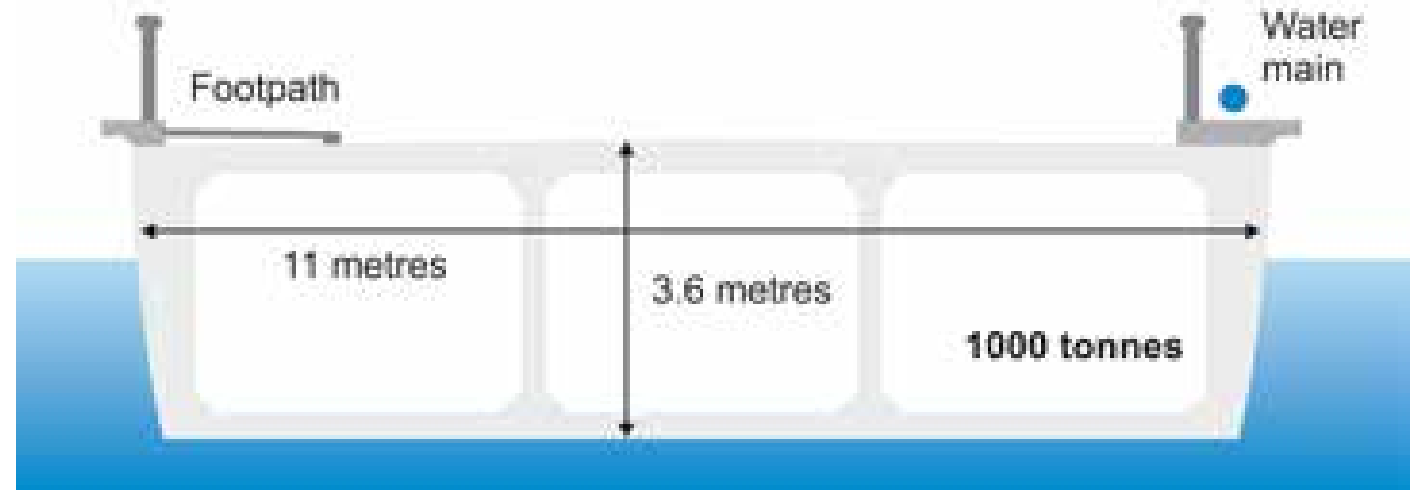


Allan Knight  
(HYDRO TASMANIA)

## Why a floating bridge?

The floating bridge was an elegant engineering solution to the problem of building a bridge across a very wide and deep river at an affordable price. Instead of sinking 60 metre piers into the muddy river bed, a design was produced which used a series of concrete pontoons that would float on the river with no piers required.

The bridge was designed by Allan Knight (1910–1998), Chief Engineer of the Public Works Department.



## Why a curved bridge?

Most floating bridges are straight, and have anchors both upstream and downstream to keep them in place when pushed sideways by wind and river flow. However, a trial showed that anchors would not hold in the soft mud of the River Derwent. Instead, Allan Knight took the idea of an arch and laid it on its side. With the curve facing upstream, the inherent strength of the arch withstood the pressures of wind and tide. All it needed were firm attachments (abutments) at each shore.



Above: The bridge nearing completion in 1943 with the works area including a concrete batching plant, steel fabrication shop and a slipway for launching pontoons in the foreground of the picture. This was to the left of where you are now standing.

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Another display panel is located at the eastern shore abutment directly opposite here.  
[www.engineeringheritage.com.au](http://www.engineeringheritage.com.au)

Right: The launching of each pontoon weighing over 1000 tonnes was a public spectacle. Admission tickets were sold as a fund raiser for the last two, which were launched nearby.

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## Building the bridge

Construction of the 24 concrete pontoons making up the bridge commenced in 1938. They were joined up into two half arches in Geilston Bay, towed into position, attached to the abutments and connected mid-river. A lift span was built near here to enable vessels to travel up and down the river.

At one point up to 120 men, including divers, were engaged in the construction project on the western shore, providing much needed employment.

Right: Divers worked on the foundations for the lift span towers which were excavated inside two cylindrical caissons (watertight retaining structures) 37 metres down to a rock bottom. The caissons were then filled with concrete up to water level. One tower base is still visible from here.

TONY LEE



Left: Vehicles paid a toll of 2 shillings which was reduced to 1 shilling in 1946 and then abolished in 1948 when the bridge was acquired by the State Government from the original investors.

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## A community grows

The bridge opened to traffic in December 1943. It bought fast road access to the east coast and Tasman Peninsula and prompted a boom in development on the eastern shore. People could commute into the city for work and shopping.



Above: This is the centre pin being installed. Hinges connected the bridge sections to the abutments to allow for the rise and fall of the tide. To the right of this panel is one of the pins from the hinges. TASMANIAN ARCHIVE AND HERITAGE OFFICE

## End of life

The floating bridge gave 21 years of service. When the four-lane Tasman Bridge was completed in 1964, the two-lane floating bridge was disconnected from its abutments and separated into its two halves. Most of the pontoons were scuttled in Storm Bay but a four-pontoon section still serves as a pier at Alonnah on Bruny Island.



ENGINEERING HERITAGE MARKER PLACED ON 5 MAY 2015

